Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-20 (canceled).

Claim 21 (new): A composition for amplifying a target polynucleotide region of a nucleic acid molecule, the composition comprising:

(a) a sample comprising a component, or extract thereof, selected from the group consisting of blood, stool, sputum, mucus, serum, urine, saliva, tear, biopsy material, tissue, PAP smear, mole, wart, agricultural product, waste water, drinking water, milk, processed food, and air;

(b) a single-stranded first polynucleotide comprising a polynucleotide region that is complementary in sequence to a target polynucleotide region of a nucleic acid molecule of said sample, wherein said first polynucleotide is circular or is circularizable when hybridized to a polynucleotide comprising said target polynucleotide region;

(c) a second polynucleotide comprising a 3' terminus hybridized to said single-stranded first polynucleotide and comprising said target polynucleotide region;

(d) a third polynucleotide comprising a polynucleotide region comprising a sequence that is complementary to a region of said second polynucleotide, and whose 3' terminus is hybridized thereto; and

(e) a polymerase that extends the 3' termini of said second and third polynucleotides in a template-dependent manner, thereby to provide exponential amplification of said target polynucleotide region.

Claim 22 (new): A transgenic animal comprising a circularized nucleic acid molecule produced through the in vitro amplification of an in vitro composition, the composition comprising:

(a) a single-stranded first polynucleotide comprising a polynucleotide region comprising a nucleic acid sequence that is complementary to a target polynucleotide region of a nucleic acid molecule of a human or non-human mammalian gene, and is circular or is circularizable when hybridized to a polynucleotide comprising said target polynucleotide region;

(b) a second polynucleotide comprising a 3' terminus hybridized to said single-stranded first polynucleotide and comprising said target polynucleotide region;

(c) a third polynucleotide comprising a polynucleotide region that is complementary in sequence to a region of said second polynucleotide, and whose 3' terminus is hybridized thereto; and

(d) a polymerase that extends the 3' termini of said second and third polynucleotides in a template-dependent manner, thereby to provide exponential amplification of said target polynucleotide region.